

National Aeronautics and Space Administration



Roundup

Lyndon B. Johnson Space Center

April | **2010**



Staying connected

JSC Director



On the cover:

In an evolving technological world, staying connected is easier than ever with new advances in social media and Information Technology.



NASA/STEPHANIE STOLL

Photo of the month:

At the Kremlin Wall in Red Square in Moscow March 19, Russian cosmonaut Mikhail Kornienko (left), Expedition 23 flight engineer; Russian cosmonaut Alexander Skvortsov (center), Soyuz commander; and NASA astronaut Tracy Caldwell Dyson, Expedition 23 flight engineer, brave the elements after laying flowers in a traditional ceremony prior to their departure for the launch site at the Baikonur Cosmodrome in Kazakhstan.

As spring comes to Texas, it's a great time to give thanks to the hard work that our Johnson Space Center family continues to accomplish.

The Constellation Program recently completed its Preliminary Design Review—a culmination of four years of dedication by men and women around the country. This partnership of civil servants and contractors is a shining example of perseverance and collaboration among the 10 NASA centers and industry partners nationwide. Developing the specifications and design for a human spaceflight system, they have successfully illustrated the forward steps in learning what we must know in order to go beyond low-Earth orbit in the years ahead. As we address NASA's new direction, the knowledge and skills this team has gained will serve us on our new paths of exploration.

Another noteworthy accomplishment: the International Space Station Program won the 2009 Collier Trophy—the top award in aviation. The National Aeronautic Association bestows the award annually to recognize the greatest achievement in aeronautics or astronautics in America. It recognized not only the program, but everyone who has supported the assembly and operations of the station, including JSC center organizations and the Space Shuttle Program. The award will be formally presented to the International Space Station Program team on May 13.

Another very successful shuttle mission, STS-130, delivered the Tranquility module and cupola, the final living areas of the U.S. On-orbit Segment (USOS). The USOS incorporates all contributions to the station by NASA, the Canadian Space Agency, the European Space Agency and the Japan Aerospace Exploration Agency, and interfaces with the Russian On-orbit Segment, which includes the components provided by the fifth partner, the Russian Federal Space Agency.

With this final delivery of the USOS, NASA was able to accept the “keys” to the USOS on the station. The Acceptance Review Board verified the delivery, assembly, integration and activation of all hardware and software required by contract, thus transferring station ownership to NASA.

As I write this column, our Shuttle, Mission Operations, Safety and Mission Assurance, astronaut corps, Flight Crew Operations and spacewalk teams continue to support our extremely ambitious flight schedule this year. Our administrative teams—Legal, Procurement, Human Resources, Information Resources, Budget and Finance, External Relations, Equal Opportunity, Chief Knowledge Office, Strategic Planning and Center Operations—all help keep JSC on track and on time. Our Engineering, Astromaterials, Commercial Orbital Transportation System, laboratories and Space and Life Sciences Directorates continue to develop new programs and projects to gain knowledge and support science and exploration.

All of these teams, along with our Constellation, Space Shuttle and International Space Station Programs—civil servants and contractors together—make these amazing successes possible through their dedication and unwavering commitment to excellence. My sincere thanks to everyone who contributes to our mission from across NASA and industry, and to the many who support them. You are our strength, and our path to a successful future depends on you.



NASA PHOTO

Mike

No longer browsing the Web ... like it's 1999



By Catherine E. Williams

The Johnson Space Center internal Web page has been like an old friend to us—serving the JSC populace in its current configuration since the 1990s. But just as what sometimes happens with old friendships, we've outgrown it—so the time was ripe for the Web site to change, too.

Enter the new internal JSC Web site, dubbed "Inside JSC." "Obviously, the whole purpose of this redesign was to make it more interactive and modern. It's gone from being simply links to more communications," said Eldora Valentine, Communications lead, Communications and Public Affairs. "It's a platform for being able to push and pull information from the workforce."

It's not always a good idea to change something just for the sake of change, but the Information Resources Directorate (IRD) put a lot of thought into why and how it was going to be redesigned.

"IRD had received a lot of feedback recommending an update. We reviewed the feedback and also did additional research to determine what sites and information people at JSC were frequently accessing," said Information Management Coordinator Allison Wolff.

Just before 2010, IRD began the extensive planning process for the JSC internal Web site of the future.

"We started benchmarking and developing high-level requirements in September. The cross-organizational project team included participation from IRD, External Relations, Human Resources, Advanced Planning, Safety and Mission Assurance, the

Chief Knowledge Officer and Quality Management Systems," Wolff said. "We also worked with the Bat Team (Bobby Watkins' senior management communications team) to finalize requirements before presenting our design to senior staff."

What came from the redesign was a need to more effectively engage JSC team members and management. Communicating ... is king.

"When the project started, we were preparing for a time of transition with the completion of the Space Shuttle Program. During times of transition, it is extremely important for the employees to hear frequently from the leadership. We felt that it was very important for the redesigned home page to have a section where the employees could hear the perspectives of the JSC director on a regular basis," said Steven Gonzalez, deputy manager, Advanced Planning Office. "Now that we are in a period of even greater transition, it is essential to have this communication from the senior leadership, as well as provide an opportunity for employees to respond with their thoughts. The new home page allows for this two-way dialogue, and the new 'Social Media' tab will encourage an ongoing conversation."

The biggest real estate on Inside JSC belongs to the Communications and Public Affairs, JSC External Relations Office.

"Our goal is to push out more timely and relevant information and give people new tools that they may have never even thought of looking at. Now you've got the button right in front of you, and

(continued on next page)

In this edition ...

- 3** No longer browsing the Web ... like it's 1999
- 5** The 'successful failure' ... 40 years later
- 6** Social media outer space scrapbook
- 8** Simplicity comes to Johnson Space Center's Information Technology infrastructure
- 9** Hubble comes alive in 3-D; Home is where the snow is
- 10** Meet Texas Twister, JSC Longhorn
- 11** Get your fill of center happenings
- 12** Watching the ice fly





community how the center has been and is positioning itself for an exciting future.”

Change is on the horizon. This revamped home page, debuting mid month, is one example of that.

“It’s a new way of doing business,” Valentine said. “In these trying times, employees need a sense of togetherness. This provides a platform for them to be able to do that.”

A preview of the new and improved “Inside JSC” home page, which will help team members stay informed and connected to center management.

it gives you access to whatever you want to know,” Valentine said. “This pulls in some components that help people navigate through different social media mechanisms.”

Along with ease in perusing social media like JSC Twitter accounts and blogs, team members will be able to see featured images and videos all in one prominent location.

Another great feature being implemented is the “Spotlight Corner.”

“We’ll go around and interview employees about the work they’re doing on site,” Valentine said. “Someone who sits in your building, or even next to you, may be working on something new and really creative, and you don’t even know about it. This is a way to showcase some of the good work going on around here.”

The Advanced Planning Office also has a large section on the improved JSC home page.

“Since Mike Coats took over as the center director, he has initiated a number of activities that have started preparing JSC for the future. The results of the initiatives can be seen in the partnerships, innovations and transformations that are occurring both within JSC and externally in the broader spaceflight community,” Gonzalez said. “The Advanced Planning Office intends to share with the JSC community the strategy planning and execution occurring at JSC, as well as the changes in human exploration externally to JSC. The goal is to inform the JSC

‘Inside JSC’ highlights

- Drop-down menus more effectively organize home page topics and allow for more featured content
- Tabbed news section gives consolidated access to center communications
- “Phrase cloud” allows for quick access to frequently searched results
- Events section permits JSC employees to submit their own events and automatically export items to their Outlook calendar
- Users can subscribe to updates through RSS feeds and e-mail alerts
- And more ... to be uncovered when the Web site goes live this month

The 'successful failure' ... 40 years later



Apollo 13 launched from Pad A, Launch Complex 39, Kennedy Space Center, on April 11, 1970.

Forty years ago, on April 11, 1970, Apollo 13 lifted off for the moon with Commander Jim Lovell, Command Module Pilot Jack Swigert and Lunar Module Pilot Fred Haise aboard. Two days later, with the spacecraft well on its way, an oxygen tank exploded, cancelling the lunar landing and putting the crew in jeopardy.

Working diligently with the Mission Operations Control Room in Houston, the crew used their lunar module as a lifeboat. Using resources only available aboard the spacecraft, an engineering tiger team helped the crew rig an adapter so that a command module air scrubber would work in the lunar module, preventing a dangerous buildup of carbon dioxide.

The mission ended safely when the crew splashed down on April 17, 1970. This "successful failure" was an absolute demonstration of the capabilities of the people who worked to bring the crew home safely, and their spirit of innovation lives on at NASA today.

NASA/PHOTO ISS02E062904



NASA/PAUL E. ALERS

Interior view of the Apollo 13 Lunar Module showing the "mail box" installed.



NASA/PHOTO ISS02E062777

The crowded Mission Operations Control Room during post-recovery ceremonies aboard the USS Iwo Jima.



NASA/PHOTO ISS02E062777

President Richard M. Nixon presents the Presidential Medal of Freedom to the Apollo 13 Mission Operations Team.



◉ Social media outer space **scr**

SOCIAL MEDIA has made quite an astronomical leap ... straight into space. During the last year, NASA has collected some milestone firsts in social media history, such as the first use of the World Wide Web aboard the International Space Station, first space tweets on Twitter and Johnson Space Center's first "Tweetup."

NASA has a presence on Facebook, Twitter, YouTube, Flickr and iTunes, along with NASA's blogs. Links to all mentioned can be found at www.nasa.gov/connect, or check out the "Social Media" tab on the new JSC internal home page.

Chess match in space

In September 2008, NASA teamed up with the U.S. Chess Federation (USCF) to host the first public chess match between astronaut Greg Chamitoff on station and contenders on Earth. The game versus the public progressed at a pace of one move per day on weekdays only—a slow match since Chamitoff only made moves when his workload permitted. He played against the kindergarten through third grade U.S. Chess Championship Team and its chess club teammates from Stevenson Elementary School in Bellevue, Wash. The K-3 champions selected up to four possible moves on Earth's turn. The public then voted on the move that was transmitted to orbit. The USCF facilitated the match on its Web site at: <http://www.uschess.org/nasa2008>



NASA/PHOTO s125e012739

Astronaut Mike Massimino, STS-125 mission specialist, uses a computer on the middeck of the Earth-orbiting space shuttle Atlantis during flight day 10 activities.

NASA on Twitter

Astronaut Mike Massimino became the first person to tweet from space on his final trip to repair the Hubble Space Telescope on STS-125 in May (@Astro_Mike). His number of Twitter followers continues to grow. Massimino currently has more than 1.2 million people following him on the popular site. According to various Twitter statistics, Massimino's Twitter is ranked 139th by number of followers across all users and is ranked first in Houston.

Station Expedition 21 Flight Engineer and Commander Jeff Williams detailed his training and provided updates on his flight via Twitter, including video and still imagery (@Astro_Jeff).

Two newbies to the Twitter universe will also be living and working aboard station in the future. Expedition 25 Commander Douglas Wheelock (@Astro_Wheels) and Expedition 26 Flight Engineer Catherine Coleman (@Astro_Cady) are now tweeting about their upcoming missions.

Astronaut twins Mark Kelly and Scott Kelly, slated to respectively command the space shuttle and the International Space Station, share their unique perspectives with the Twitter community—and with each other—as they train at locations around the world (Mark Kelly is @shuttlecdrkelly; Scott Kelly is @stationcdrkelly).

More astronauts you can follow on Twitter are Clay Anderson (@Astro_Clay); TJ Creamer (@Astro_TJ); Soichi Noguchi (@Astro_Soichi), in English and Japanese; and Jose Hernandez (@Astro_Joe), in English and Spanish.



A STS-130 Tweetup participant waves hello using a spacesuit glove during JSC's first Tweetup.

NASA/BLAIR jsc2010e024286

NASA on Facebook

JSC has a Facebook page where viewers can find mission updates, pictures from its Flickr account, RSS feeds and the opportunity to interact with other NASA fans. The page is updated approximately five times per day. The JSC page can be found at <http://www.facebook.com/pages/NASA-2Explore/24257241459#>, and the official NASA page on Facebook is at <http://www.facebook.com/nasa.gov>.

apbook

Polansky uses Twitter and YouTube to communicate with public

STS-127 Commander Mark Polansky, aboard Space Shuttle *Endeavour* on a mission to the International Space Station last June, shared updates about his training and flight on Twitter (@Astro_127). He invited followers to submit video questions via YouTube that he would answer from orbit.

STS-127 delivered the final portions of the space station's Japanese laboratory. While posting tweets about his crew's training, Polansky also selected video questions submitted by followers. The videos were transmitted to orbit during the mission and answered live during a special event broadcasted on NASA Television and posted to Polansky's Twitter and YouTube pages.

World Wide Web goes out of this world

Astronauts aboard the International Space Station received a special software upgrade in January—personal access to the Internet and the World Wide Web via the ultimate wireless connection.

Expedition 22 Flight Engineer T.J. Creamer was the first to use the new system when he posted the first unassisted update to his Twitter account (@Astro_TJ) from the space station. His historical tweet read:

"Hello Twitterverse! We r now LIVE tweeting from the International Space Station -- the 1st live tweet from Space! :) More soon, send yours"

Previous tweets from space had to be e-mailed to the ground where support personnel posted them to the astronaut's Twitter account.

Astronauts are subject to the same computer use guidelines as government employees on Earth. In addition to this capability, the crew will continue to have official e-mail, Internet Protocol telephone and limited videoconferencing capabilities.

Astronaut Robert L. Satcher Jr. welcomes the STS-130 tweeps to Space Center Houston and the Johnson Space Center. He gave a special presentation about his time in space aboard STS-129.



NASA/BLAIR jsc2010a024301

JSC's first 'Tweeup'

During *Endeavour's* STS-130 mission, NASA Twitter followers went inside the heart of a space shuttle mission. NASA hosted a unique Tweeup on Feb. 17, where more than 80 "tweeps" from 25 states and eight different countries, and beyond 150,000 followers, were reached through participant profiles.

NASA randomly selected 100 individuals on Twitter from a pool of registrants who signed up on the Web. The event started at Space Center Houston, where participants had the opportunity to meet astronaut Robert L. Satcher Jr. (@Astro_Bones and @ZeroG_MD) and tweet about NASA experiences.

After lunch, Twitter followers also took a tour of JSC and viewed mission control and the astronauts' training facilities. They also spoke with flight directors, trainers, astronauts and managers.

A tweeep enjoys a tour of the Neutral Buoyancy Laboratory.



NASA/BLAIR jsc20110e024344

What are you waiting for? Get connected

Follow us and NASA astronauts on these sites:

Twitter: @NASA_Johnson and @NASA_Astronauts

Facebook: NASA and NASA2Explore

Youtube: ReelNASA

Simplicity comes to Johnson Space Center's Information Technology infrastructure



By Catherine E. Williams

The Information Technology (IT) infrastructure that's going to make your life easier? There's an acronym for that: ICAM.

Identity, Credential and Access Management (ICAM) came to Johnson Space Center after NASA fulfilled Homeland Security Presidential Directive-12, issued in 2004. Now that background checks are complete and new credentials have been issued, including smartcards for the agency, ICAM is on the scene for the long-term management of those IT systems and processes. It's not just about protecting our assets—it's about making all our IT systems connect in a seamless way for the user.

One way NASA will achieve that is through the NASA Consolidated Active Directory (NCAD) project.

"NCAD consolidates all JSC and White Sands Test Facility Windows Active Directory user accounts, workstations and servers into a single agency domain called the NASA Data Center (NDC)," said Mike Nevills, JSC NCAD project manager. "NCAD migrates JSC's IT infrastructure into the agency's so that users may use their badge and Personal Identification Number (PIN) for login."

Consolidating JSC's users, workstations and servers enables a simplified sign-on process for every person, regardless of where they log in.

Another improvement comes in the form of "The Access

Launchpad," an online tool you can use to create and update your NASA user profile or reset a forgotten password, all in a few steps. Finally, with ICAM, comes a password worth remembering. The Launchpad ID and password currently accesses 47 applications across the agency, including SATERN, IdMAX, Secure WebEx, JSC Challenges and more.

ICAM is changing the way things were done in the past and evolving with the times.

"We now have a single way to request access to any IT system at NASA. We are converging on the ability to use the same credentials (user name, password, smartcard) when

logging into any IT application at the agency," said Tom Miglin, ICAM Business Process Lead.

"We have a common method to log into desktops no matter what center you are at."

In addition, the smartcards will very soon come into play.

"This summer, we will begin to use our smartcards (new badges) and a PIN to log into desktops. This PIN will not have to be changed for the lifetime of your smartcard (five years)," Miglin said.

While the extra security that goes along with smartcard and PIN protection is reassuring, the mobility that comes with ICAM is a welcome change.

"With the move to mobile

devices and cross-center collaboration, this agencywide IT infrastructure will allow more transparent mobility when traveling between centers," Miglin said. "If you have a device approved for NASA networks, you will be able to connect that device to agency resources the same way at all centers."

ICAM focuses on increased Information Technology security and one profile/password for numerous NASA applications, regardless of the user's location.



NASA/STAFFORD JSC2010E013989

Hubble comes alive in 3-D

This image depicts a vast canyon of dust and gas in the Orion Nebula from a 3-D computer model based on observations by NASA's Hubble Space Telescope and created by science visualization specialists at the Space Telescope Science Institute (STScI) in Baltimore, Md.

The model takes viewers on an exhilarating ride through the Orion Nebula, a vast star-making factory 1,500 light-years away. This virtual space journey isn't the latest video game, but one of several groundbreaking astronomy visualizations created by experts at STScI. The cinematic space odysseys are part of the new IMAX film "Hubble 3D," which opened at select IMAX theaters worldwide.

The 43-minute movie chronicles the 20-year life of Hubble and includes highlights from the May 2009 servicing mission to the Earth-orbiting observatory, with footage taken by the astronauts. The giant-screen film showcases some of Hubble's breathtaking iconic pictures, such as the Eagle Nebula's "Pillars of Creation," as well as stunning views taken by the newly installed Wide Field Camera 3.



NASA, G. Bacon, L. Frattare, Z. Levay, and F. Summers (STScI/AURA)

Home is where the snow is

The Soyuz TMA-16 spacecraft, holding Expedition 22 Commander Jeff Williams and Flight Engineer Maxim Suraev, is seen as it connects with a snowy Earth near the town of Arkalyk, Kazakhstan, on March 18. NASA astronaut Williams and Russian cosmonaut Suraev returned from six months onboard the International Space Station, where they served as members of the Expedition 21 and 22 crews.



NASA/PHOTO BILL INGALLS

Spotlight Texas Twister

Johnson Space Center Longhorn

Translator:

Catherine E. Williams



NASA/PHOTO JSC2004E22699

Q: Coolest part of your job?

A: I take my role at Johnson Space Center very seriously. Some say I make an important contribution to JSC's ecosystem by "giving back to the Earth."

Q: Favorite hobbies or interesting things you do away from the office?

A: Sometimes I grub on the east side of the pasture as opposed to the west side. (I am a thrill-seeker by nature.)

Q: What would you be doing if you weren't in your current job at JSC?

A: I hate to even speculate, but I imagine the gig might involve a plate and some utensils. Um ... did I mention how much I love JSC?

Q: What did you want to grow up to be when you were a child?

A: A Soyuz commander. There's gotta be some way they can fit me into that capsule ...

Q: What would people be surprised to know about you?

A: I think curling and synchronized swimming are legitimate sports.

Q: What is your favorite quote or motto?

A: "I don't know how to put this, but ... I'm kind of a big deal."
— Ron Burgundy, "Anchorman"

Q: Last good book you read?

A: "Chuck Norris vs. Mr. T: 400 Facts About the Baddest Dudes in the History of Ever," by Ian Spector

Q: Last good article you read?

A: Anything by Catherine E. Williams. She's just fantastic.

Q: Who are your heroes and why?

A: I have a soft spot for the astronauts of yore. Because of them, I get to graze in a pasture next to some great technological eye candy. Although ... the shed over the big rocket was not in my best interest. I am quite upset no one thought to consult with me first.

Q: What quality do you most admire in people?

A: Vegetarianism. After that ... kindness toward living creatures.

Q: What does JSC mean to you?

A: Well, for me, it's simply the land of opportunity—in the literal and figurative sense. Innovation also comes to mind. Speaking of which—surely my invitation to participate in a rap forum at Innovation 2010 has been lost in the mail ...

Q: What do you most look forward to at NASA?

A: I look forward to NASA answering the question: are there cows in outer space? I have to say, my romantic aspirations on Earth have been stymied by my lack of options.

Did you know?

You would have to milk 260 cows for an entire year to fill a space shuttle's external fuel tank with 529,000 gallons of milk.

WANTED!

Do you know a JSC colleague or team that does something extraordinary on or off the job? Whether it's a unique skill, interesting work, special professional accomplishment, remarkable second career, hobby or volunteerism, your nominee(s) may deserve the spotlight!

The Roundup shines the light on one special person or team each month, chosen from a cross section of the JSC workforce. To suggest "Spotlight" candidates, send your nomination to the JSC Roundup Office mailbox at jsc-roundup@mail.nasa.gov. Please include contact information and a brief description of why your nominee(s) should be considered.

Center Scoop

Can we get a 'yeehaw' for Johnson Space Center?

On Feb. 24, the 14th Annual Texas Independence Trail Ride entertained Johnson Space Center team members who came out to welcome the riders along Second Street. The parade made a brief stop at Rocket Park, and some trail riders swung by the JSC Child Care Center for a close-up with the kids. Later, the riders camped overnight at the Gilruth Center before heading on their way to usher in rodeo festivities.



NASA/JAMES BLAIR | jsc2010e026837



NASA/LAUREN HARNETT | jsc2010e02467

A place for space with Boy Scouts of America

Communications and Public Affairs, JSC External Relations Office brought the excitement of NASA to the Sam Houston Area Council Boy Scouts of America 100th anniversary gala at Minute Maid Park on Feb. 18. NASA's exhibit featured hands-on items such as gloves, helmets and space food, as well as photo opportunities and displays. JSC volunteers shared information on space exploration with more than 1,000 guests. About 22,000 attendees, including scouts, local- and state-level elected officials and former and current astronauts, celebrated the anniversary of the Boy Scouts of America.

Roundup

The Roundup is an official publication of the National Aeronautics and Space Administration, Johnson Space Center, Houston, Texas, and is published by the Public Affairs Office for all Space Center employees. The Roundup office is located at the Johnson Space Center, Building 2. The mail code is AD94. Visit our Web site at: <http://www.jsc.nasa.gov/roundup/online/> For distribution questions or to suggest a story idea, send an e-mail to jsc-roundup@mail.nasa.gov.

Catherine Ragin Williams Editor
Neesha Hosein Assistant Editor
Logan Goodson Graphic Designer
Laura A. Rochon NASA Publication Manager
Cassandra V. Miranda Contractor Publication Manager

PRSRT STD
U.S. POSTAGE
PAID
WEBSTER.TX
Permit No. 39

OR CURRENT RESIDENT

Watching the ice fly

On March 12, NASA teamed up with the Houston Aeros for a special night at the Toyota Center, offering discounted tickets for Johnson Space Center team members. Employees at the event were in for a special treat as they watched astronauts Christopher Cassidy, Mario Runco Jr. and Christopher Ferguson take part in the exciting puck drop to start the game.

Cassidy, Runco and Ferguson also participated in an autograph session for the fans while JSC's mascot Cosmo clowned around with kids and adults alike.



NASA/HARNETT JSC2010E040755



NASA/HARNETT JSC2010E040743



NASA/HARNETT JSC2010E040778